REMARKS/ARGUMENTS

Filing Receipt

The Applicant filed a Request for Corrected Filing Receipt on April 29, 2002 requesting correction of the Filing Receipt mailed on April 4, 2002. When a Corrected Filing Receipt was not mailed, Applicant filed a second Request for Corrected Filing Receipt on March 12, 2003. Applicant has still not received a Corrected Filing Receipt and, therefore, respectfully requests that one be mailed to the Applicant at the earliest possible date.

Status of the Claims

Claims 1-10 and 12 are pending in the application. Claim 11 was previously withdrawn. The pending Office Action mailed on October 3, 2003 has rejected Claims 1-10 and 12. Applicant responds to the rejections as follows:

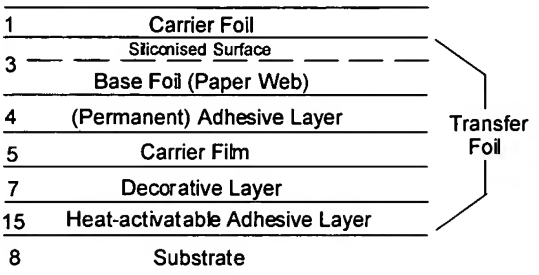
Claim Rejections - 35 USC § 103

Claims 1-10 have been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 3,922,435 to Asnes ("Asnes" or "the `435 patent") in view of U.S. Pat. No. 5,795,425 to Brault et al. ("Brault" or "the `425 patent") in view of U.S. Pat. No. 5,925,431 to Schoenfelder ("Schoenfelder" or "the `431 patent").

The present invention is directed to transfer foils which are described in the specification at page 3, lines 13-18 as including "a base foil **[3]** which is connected by means of a permanent adhesive **[4]** to the one surface of a carrier film **[5]**, at the other surface of which is arranged the

decorative layer arrangement **[7]** which is releasable from the carrier film **[5]** under the effect of heat, and which on its side remote from the carrier film **[5]** has the heat-activatable adhesive layer **[15]** serving for joining to a substrate **[8]**."

Claim 1 of the present invention claims a transfer foil having the following structure:

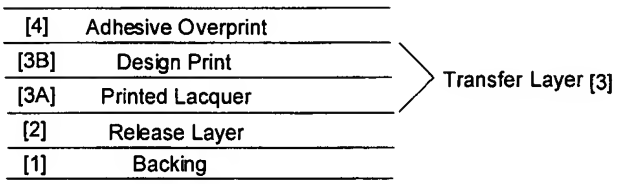


The base foil (3) has a siliconised surface on the side adjacent to the carrier foil (1) so that it is releasably adhered to the carrier foil (1). (Note, the siliconised surface of the base foil (3) is shown as a separate layer for illustrative purposes.) The surface of the base foil (3) on the side adjacent to the carrier film (5) is not siliconised so that it has good adhesion. (See specification, p. 11, lines 26-31.) This allows the base foil (3) to be easily detached from the carrier foil (1). The detached base foil (3) and adjoining layers (adhesive layer (4), carrier film (5), decorative layer (7) and adhesive layer (15)) can then be applied to a substrate (8) by contacting the heat-activatable adhesive layer (15) to the substrate (8). The specification discloses at page 4, lines 2-5 that, "Then, by the appropriate action of pressure and heat, the decorative layer arrangement [7] is joined to the substrate [8] and then the carrier film [5] jointly

with the base foil [3] is pulled off the decorative layer arrangement [7] which remains behind on the substrate [8]."

The distinguishing features of the transfer foil are: (i) a base foil (3) which is formed by a paper web and has a first surface which is permanently adhered to a carrier film (5); (ii) a second surface of the base foil (3) which has a siliconised surface which releasably adheres the base foil (3) to a carrier foil (1); and (iii) a decorative layer (7) which is heat releasable so that the application of heat to the transfer foil simultaneously adheres the heat activatable adhesive layer (15) to a substrate (8) and releases the decorative layer (7) from the carrier film (5).

The Asnes `435 patent discloses "an essentially five layered heat-transfer label" (col. 8, lines 26-48), which has the following structure:



The structure of the heat-transfer label is described at col. 8, lines 26-34 and 49-54 as follows:

> [A]n essentially five layered heat-transfer label is provided having a temporary backing or carrier **[1]**, a polymeric dry release layer **[2]** disposed along the upper surface of the temporary backing, a clear lacquer layer **[3A]** printed over the upper surface of the polymeric release layer **[2]**, a design print **[3B]** which may include a number of layers disposed upon the upper surface of the lacquer layer **[3A]** and an over-printed clear, heat-activatable adhesive layer **[4]**.

> Upon heat transfer, the label (adhesive overprint **[4]**, design print **[3B]** and printed lacquer **[3A]**) (the backing **[1]** and dry release layer **[2]** have been dry peeled off the lacquer layer **[3A]** during transfer) is firmly affixed to the transfer surface, usually plastic, such as a plastic bottle, to which it is transferred.

The Office Action describes the heat transfer label disclosed in Asnes at page 2, lines 15-22 as follows:

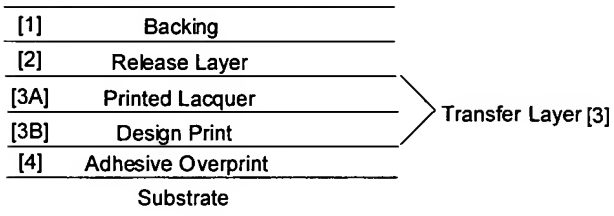
> Asnes teaches a dry-release heat transfer label for objects such as plastic bottles. The label is formed by a resinous release layer **[2]** on a suitable temporary carrier (carrier film) **[1]**, with a transfer layer **[3]**, including a design print **[3B]** on the release layer **[2]** and a heat-activatable adhesive layer **[4]** upon the transfer layer **[3]**. Asnes explains the composition of the release layer **[2]** and the transfer layer **[3]** are such that at heat transfer temperatures, the relative strengths of the bonds between them and their cohesiveness, permits the release layer **[2]**, with its temporary carrier **[1]**, to be stripped from the transfer layer **[3]** which remains adhered to the object without leaving any substantial amount of the transfer layer **[3]** with the release layer **[2]**.

The description of the heat transfer label in the Office Action is substantially correct except for the description of "a design print **[3B]** on the release layer **[2]**." "Chart 1" in the Asnes specification (col. 8, lines 40-46) clearly shows that the design print **(3B)** is disposed between the printed lacquer layer **(3A)** and the adhesive overprint layer **(4)**, and that the design print **(3B)** is <u>not</u> on the release layer **(2)**. Asnes teaches that, "Following application of the release layer **[2]**, the release layer coated backing **[1]** is then print coated with the printed clear lacquer **[3A]**. . .This layer **[3A]**, after drying, serves as a primer and foundation for the design print **[3B]** and prevents the ink of the design print **[3B]** from migrating or striking into the release layer **[2]** during label formation." Asnes, col. 9, lines 64-66 and col. 10, lines 10-13.

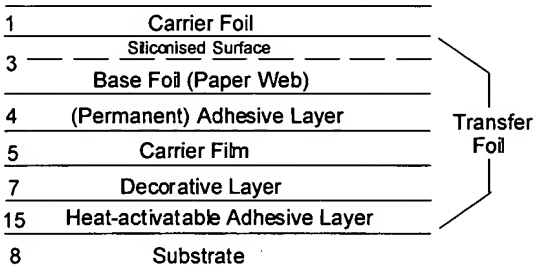
Asnes also teaches that the design print **(3B)** is formed using different colored inks. At col. 10, lines 34- 39, Asnes discloses that "The design print **[3B]** is print coated in conventional manner directly onto the printed lacquer layer **[3A]** and dried in a manner dependent upon the exact nature of the design. Thus, the ink utilized in the design print **[3B]** may vary from 1 to 6 colors depending upon the label and these separate steps." Accordingly, the heat transfer label disclosed by Asnes has a design print **(3B)** formed by printing inks onto a lacquer layer **(3A)**.

The structure of the heat transfer label disclosed in Asnes is compared to the structure of the present invention below:

Asnes



Present Invention



The Office Action finds that Asnes discloses the carrier film (5)/decorative layer (7)/heat activatable layer (15) of the present invention, but states at page 3, line 8 that, "Asnes is silent to a permanent adhesive [4] secured to a base foil/paper [3] and being siliconized." Accordingly, the Office Action acknowledges that Asnes does not teach the transfer foil of the present invention which comprises a paper web base foil (3) permanently adhered on one surface to a

carrier film (5) and releasably adhered on its opposing siliconised surface to a carrier foil (1). To overcome the shortcomings of Asnes, the Office Action proposes the combination of Asnes and Brault to render the transfer foil of the present invention obvious.

The Brault `425 patent is directed to "A novel two step process . . . for the manufacture of protected, distortion-free, full-color ink jet images for use on large format posters, billboards and the like [and] . . . [a] novel ink receptive element, which is used in the process, comprises a temporary carrier layer; a protective layer; and an adhesive ink receptive layer." Abstract. There is no disclosure nor suggestion in Brault that the process or ink receptive element can be used for a transfer foil. Moreover, there is no teaching in Brault that would lead one of ordinary skill in the art to combine Brault's novel ink receptive element with the dry release heat transfer label disclosed by Asnes.

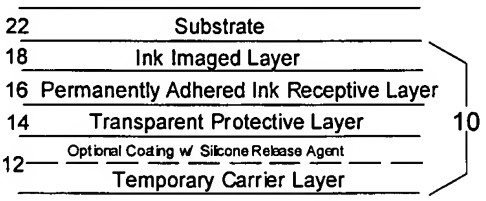
The Brault `425 patent discloses a process for forming a protected ink jet image on a substrate using an ink receptor element and a substrate. Col. 3, lines 38-40. Brault describes the formation of the structure at col. 4, lines 14-18 and 60-65 as follows:

> The imaged receptor element (10) which is formed comprises; a temporary carrier layer (12), an image transparent, protective layer (14), an image transparent, adhesive, ink receptive layer (16), and an ink imaged layer (18).
>
> In preparation for the second step of the process of this invention, the imaged receptor element (10) is oriented to a substrate element (20), comprising a substrate (22), so that a surface of the substrate (22) faces the surface of the ink imaged layer (18).

Brault discloses at col. 7, lines 29-33 and 62 to col. 8, line 2 that the ink imaged layer (18), the ink receptive layer (16) and the protective layer (14) are permanently adhered to the substrate (22) by the process:

> The adhesive material of the image transparent, adhesive, ink receptive layer (16), functions to permanently adhere the ink imaged layer (18), the ink receptive layer (16) and the protective layer (14) of the imaged receptor element (10), to the substrate [22] during the process of this invention.
>
> The substrate (22) typically functions as the final support for the protected ink imaged layer (18) formed during the process steps of this invention. The substrate (22) may be any surface upon which an ink jet image is desired. Typically, it is a web or sheet material possessing dimensional stability and adherence properties through the adhesive of the ink receptive layer (16) to the ink imaged layer (18) of the imaged receptor element (10).

Figure 2 of the Brault patent shows the structure of the ink receptor element (10) before it is adhered to a substrate (22). After the ink receptor element (10) is adhered to the substrate (22), it has the following structure:

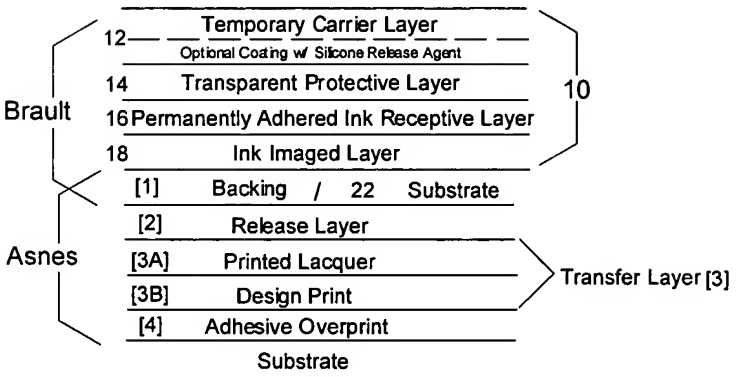


The Office Action describes the Brault patent at page 3, lines 16-17 and states, "Adhesive material (16) is interdisposed between protective layer (14) and imaged layer (18). [Imaged layer] (18) is adjacent to a substrate [22] (a carrier foil)." This statement is incorrect. Brault neither teaches nor suggests that the substrate (22) is a carrier foil. Throughout the specification,

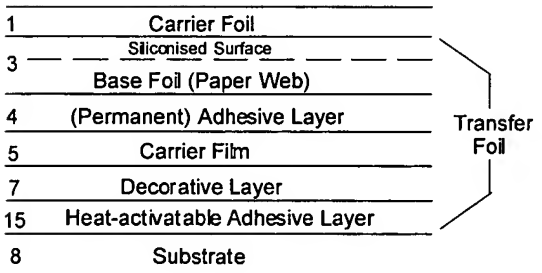
Brault consistently states that, "The substrate (22) typically functions as the **final support** for the protected ink imaged layer (18) formed during the process steps of this invention." (Emphasis added.) Col. 7, lines 62-64. One of ordinary skill in the art of heat transfer labels and foils would understand that a "carrier foil" is not the "final support" for a transfer label. Instead, a "carrier foil" temporarily supports a transfer label or foil until it is adhered to a "final support." Accordingly, Brault neither teaches nor suggests attaching the ink receptor element (10) to a "carrier foil." Moreover, Brault teaches away from attaching the ink receptor element (10) to a "carrier foil" since a carrier foil would not be used as a "final support."

The combination of Asnes and Brault suggested by the Office Action requires the substrate (22) in Brault to be used as a "carrier foil" and substituted for the backing (1) in Asnes which Asnes describes as a "temporary backing or carrier." Col. 8, line 63. The structure formed by substituting Brault's substrate (22) (which Brault teaches is a "final support") for the "temporary backing or carrier" of Asnes is shown below.

Combining Asnes and Brault



Present Invention



The structures of the transfer foils of the present invention are substantially different from the heat-transfer label that would be formed by combining Asnes and Brault and this is clearly illustrated by a comparison of the structure of the suggested Asnes/Brault combination and the structure of the transfer foils of the present invention.

First, the base foil (paper web) (3)/permanent adhesive layer (4)/carrier film (5) structure of the present invention is not the same as the transparent protection layer (14)/permanently adhered ink receptor layer (16)/ink imaged layer (18)/substrate (22) disclosed by Brault. The base foil (3) of the present invention "is formed by a paper web" (Claim 1) while the corresponding transparent protective layer (14) in the Brault structure does not include paper.

The Office Action states at page 3, lines 18-21 that, "it would have been obvious to one of ordinary skill in the art to modify the heat transfer label of Asnes by laminating the recording

element of Brault by including a permanent adhesive [16]/paper/siliconized structure [12] for the purpose of securing a design to a substrate." This statement is incorrect. Brault does not teach an internal layer made of paper. Brault only teaches that the outer layers, i.e., the temporary carrier layer (12) (col. 5, lines 7-10) and the substrate (22) (col. 8, lines 2-5), can be a paper layer. The layer in the Brault structure disposed between the permanent adhesive (16) and siliconized structure (12) is the transparent protective layer (14). Brault discloses all of the materials that can be used to make the transparent protective layer (14) at col. 5, lines 17-35. None of these materials listed is paper. Instead, Brault discloses that polymeric materials are preferred for the transparent protective layer (14).

Second, Brault discloses that "[t]he substrate (22) may be any surface upon which an ink jet image is desired." Col. 7, lines 64-65. One of ordinary skill in the art would not find it desirable to form an ink jet image on the backing (1) of the Asnes structure which is a carrier for a transfer foil. Once Asnes' transfer foil is applied to a substrate, the backing (1) is released and discarded. There would be no benefit or incentive to use Brault's "full-color ink jet images" (Abstract) as a carrier foil for Asnes' transfer foil. Moreover, in order to find the present invention obvious in view of a combination of Asnes and Brault, the corresponding layers of the transfer foil of the present invention (i.e., the base foil (3)/permanent adhesive layer (4)/carrier film (5)) would have to be the same as the transparent protection layer (14)/permanently adhered ink receptor layer (16)/ink imaged layer (18)/substrate (22) of the Brault structure. These layers in the Brault structure include an ink imaged layer (18), while the corresponding layers of the

transfer foil of the present invention (i.e., the base foil (3)/permanent adhesive layer (4)/carrier film (5)) do not include an imaged layer, nor do they include any type of decorative layer. Instead, the corresponding layers of the transfer foil of the present invention include a paper web permanently adhered to a carrier film. One of ordinary skill in the art would not find it obvious to substitute the Brault structure with an ink imaged layer (18) for the paper web/permanent adhesive/carrier film layers of the present invention.

There is another essential difference between the transfer foil of the present invention and Brault, namely the fact that the adhesive material (16) is not inter-disposed between a protective layer (14) and an imaged layer (18). First, the "imaged layer (18)" as taught by Brault is not a layer in the true sense, since it is not a continuous layer that extends over the whole surface of the adjoining layers. Second, the imaged layer (18) is formed by depositing ink droplets on the adhesive material layer (16) using an inkjet printer. These ink droplets do not form a separate layer but are absorbed by the ink receptive (adhesive) layer (16), which means that Brault forms a combined ink imaged layer (18) and adhesive ink receptive layer (16). There can be no other interpretation of Brault since a separate ink imaged layer (18) extending across the surface of the adhesive ink receptive layer (16) would prevent the adhesive ink receptive layer (16) from adhering to the substrate (22).

Brault clearly states that his invention "relates to a novel process for forming a protected ink jet image on a substrate using an ink receptor element and a substrate." Col. 3, lines 38-40.

The suggested combination of Asnes and Brault would produce a structure which included Asnes' design print layer (3B) and Brault's ink imaged layer (18). There is no teaching nor suggestion in either reference for forming a structure which contained both a design print layer and an ink imaged layer. There is even less incentive for forming such a structure when the combination would require Brault's ink imaged layer to be discarded after Asnes' design print layer was adhered to a substrate. Under these circumstances, one of ordinary skill in the art would not find it obvious to combine Asnes and Brault.

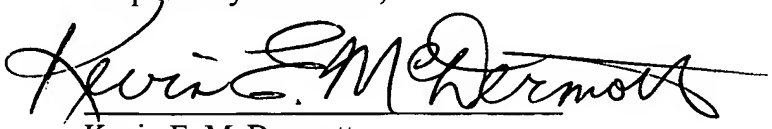
Third, the present invention requires the base foil (3) to be siliconised so that it is releasably adhered to the carrier foil (1). In contrast, Brault siliconises the temporary carrier layer (12) which is equivalent to the carrier foil (1) of the present invention. Brault does not siliconise the transparent protection layer (14) which corresponds to the base foil of the present invention. Thus, a combination of Asnes and Brault does not teach nor suggest the structure of the present invention.

Claim 12 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Asnes in view of Brault, U.S. Pat. No. 5,925,431 to Schoenfelder ("Schoenfelder" or "the `431 patent") and further in view of U.S. Pat. No. 5,681,644 to Dressler ("Dressler" or "the `644 patent"). As discussed above, the combination of Asnes and Brault does not teach the structure of the present invention. The addition of a second adhesive layer in Claim 12 does not make the structure obvious in view of Asnes and Brault. Moreover, a combination of Asnes and Schoenfelder

and/or Dressler does not make the structure in Claim 12 obvious. Schoenfelder teaches an adhesive label having separate subdivided elements. Dressler teaches an ink transfer decal wherein ink is printed on a carrier sheet (col. 4, lines 66-67) and two adhesive layers can then be printed on the ink layer (col. 5, lines 29-30 and 35-37). The combination of Asnes with Brault, Schoenfelder and/or Dressler does not teach the structure of the transfer foil of the present invention, nor do these references make the present invention obvious.

Applicant believes that the prior art references have been clearly distinguished and a combination of these references would not render the present invention obvious to one of ordinary skill in the art. Therefore, the Applicant respectfully requests that the rejections of the claims be withdrawn and that the claims be allowed.

Respectfully submitted,



Kevin E. McDermott
Registration No.: 35,946
Attorney for Applicant

HOFFMANN & BARON, LLP
6900 Jericho Turnpike
Syosset, New York 11791
(516) 822-3550

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